

COLLIDER ACCELERATOR SHUTDOWN SCHEDULE – REV. 1

RESULTS – 1400HRS, APRIL 2, 2003

R. Zaharatos – April 2, 2003

RHIC SHUTDOWN PERIOD(FOUR HOURS): WEDNESDAY, APRIL 2, 2003
- 0830 TO 1230HRS

STUDIES USING UNPOLARIZED PROTONS WILL CONTINUE WITH
BEAM UP TO THE “W” DUMP

AGS – NO ACCESS

BOOSTER – NO ACCESS

LINAC – NO ACCESS

RHIC TUNNEL REMOTE CONTROLLED ACCESS PERIOD – 0845HRS –
1200HRS

RHIC RESTRICTED ACCESS AREAS – IR’S: BRAHMS, PHENIX(BOTH 1-
2 HRS), AND STAR(3HRS). TUNNEL ZONES: 5Z1(3.5HRS AND 6Z2(2HRS).

PRIMAY JOBS:

JOBS STATUS CODE: **C** complete **IP** in-process **RS** reschedule
CAN cancelled * additions

RHIC TUNNEL

- P.S.’s – repairs(See List)
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|-----------|---|--|
| C | 1 | RF – repair Ya32 Accel. Cavity |
| RS | 2 | Lead flow temp. measurements(Cryo/Sadinsky) |
| RS | 3 | Cryo Controls – repair thermal switch at 4Q6(Gate 4GE2/Kollmar) |
| C | 4 | BPM/PLL adjustments in sectors 1 & 2(Sikora) |
| C | 5 | Polarimeter in sect. 12 – replace preampl.(1-2hrs/Sandro) |
| C | 6 | Check polarity of Spin Rotator(Yo5-rot3-1.4(alcove 5C/Ganetis) – Pol.
corrected by reversing P.S. leads |

RHIC EXTERNAL

- C 1 V125 Abort Kicker Brd. – change firmware to improve time stamp accuracy(10a-ps2 and ps3)

RHIC POWER SUPPLIES

Maintenance Performed on 4/2/03(D. Bruno)

Ice Ball Checks and Repairs

1. Found vertical portion of I-04Q9 not warm. Replaced heater. This was not an easy thing for one person to do. Would not suggest doing this solo any more unless there is an abundance of time.
2. I-07Q8 not working properly. Found heater working but not keeping up with the load. Installed a fan to help the heater.
3. Spin Rotator near 1007W with some ice on it. Found that the two thermostats were in series and only one of them was closed. Thermostat with red leads was jumpered out.
4. Replaced a thermostat on I6Q20.

1004B Q6 and Q7 Time Constant Work

Measured load, closed loop Vloop, and closed loop I loop of yo4-qf6-ps and yo4-qd7-ps

1004B Main p.s.'s Timing Resolver Work

Not done

Corrector Power Supplies: See Table below Done

1. Start checking corrector p.s. fans and rack fans since not many correctors to do.

Corrector P.S.	Problem On all of these check AC connections and DC connections at the magnet and power supply.	Comments – What was really done- What was found	Serial Number
Yo5-oct2-ps	Tripped off once on 2/5, 3/17, 3/25. Swap out with a p.s. that has new micro and R and C mod.	Swapped out PS- was not a REV 14. Tightened magnet terminals on magnet tree. Nothing was loose. AC connections were also tight.	87 removed, 495 installed
Yi7-sx3-ps	False readbacks, replace node card cable.	Node Card cable replaced	

Yi2-tv4-ps	Does not show local on pet page when you put into Local. Investigate, possibly needs a new node card cable, try installing one, I think we have them in the trailer, check with Brian. Low priority. We probably should not touch it at all. Don't touch it yet.		
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Magnet Work

Ceramic Feedthrough cleaning in sector 3 where ground fault was found.

Done

Spin Rotator Magnet Heater Work

Paul needs to work on a snake thermostat-Done

Tq QPAIC in 1010A-Check J24

Not Done

4b-ps3

Wing needs to re-boot-**Done**

Permit Bypass Chassis in 1008B

Wing & Someone need to check it out, readback doesn't look right.-**Not Done**

Alcove UPS Work

Go into tunnel with PK and measure current draw on 110V panel that will go onto UPS-**Done**

Snake and Spin Rotator P.S. Work

1. This time swap out node card cables for bo6-rot3-1.4 and yi6-rot3-2.3 (They tripped OFF) and swap out Power Ten for yo5-rot3-2.3-ps (Quenches). **Done.**
2. Next time swap out node card cables for yi7-rot3-2.3-ps, yo8-rot3-2.3 and yo5-rot3-1.4 (They tripped OFF). **None of these 3 were done.**

IR Power Supplies

1. bo2-qd1-ps shows an AC phase flt when there is a QLI. If there is time take a look at this. **Not Done**
2. Possibly remove bo3-tq6 and/r yi10-tq5 because they each tripped on FET faults once and we may want to examine one and see if any FET's are blown. **Not Done and we probably won't do.**
3. In 1010A, if there is time we may want to check more tq power supplies for shorted IGBT's by looking at the AC current during a turn ON. Looked at yo9-tq4, 5, 6. yi10-tq4, 5, 6 and bo10-tq4. Only yo9-tq4-ps was shorted. **Yo9-tq4 has been swapped out. Not Done**

4. Possibly swap out firing card of y8-dh0-ps. **Not Done**
5. Screw in more 3u chassis cards. 1012A done. Half of 1004B done and some of 1002B done. Some done at 6b. **Not Done this time.**
6. Inspect buildings 1004B, 1006B, 1008B 1012A for broken internal fans on stand alone dynapowers. 1010A and 1002B were checked. **This was Done. Found b12-q7, b12-dh0, yo4-qd7 and y-qtrim all had one bad fan in the rear DC compartment.**
7. Put main p.s. filter material in rear doors of tq racks. **Not Done.**
8. Keep an eye on y12-dh0 (OFF problem) and y6-dh0 (large voltage ripple and spike). Nothing to do as of now. **Has not returned since March 17th when we replaced backplane.**
9. Keep an eye on yo4-qf2-ps. It caused a QLI on Sat 3/15/03 at 1:15 and Wed 3/19/03. It looks like the voltage spiked up on 3/15 and the p.s. started to oscillate on 3/19. **Has not returned**

Tunnel Work

1. Tape down floor fans in the tunnel that cool magnet trees. **Not Done.**

QPA Work

1. Start replacing all QPA D connector hardware?? (b2-dh0-qp, yo8-qf8-qp and yo8-qd1-qp done) **No One. Not Done.**

Gamma-T Power Supplies

Go into alcoves and tighten AC connections of Gamma-T's in 3C, 7A, 7C, 9A. **No One. Not Done.**

Snake and Spin rotator p.s. Work

Label the rest of the circuit breakers. **Not Done.**

Quench Detector

Go around and check quench detector fans are working - **Dan O, Not done.**

Valve Box Work

1. Need to replace flashers at top of valve boxes for 2b and 6b. **Not done.**
2. Check light control chassis at 10A because no green lights work. **Not done.**
3. Check green light above blue valve box in 1002B. **Not done.**
4. Light control chassis in 1008B needs to be fixed. Opto logic is reversed. **Not done.**

Sector 9 Lead Flow Temp Experiments

George and Cryo. **Done and probably will need to do again.**

ATR Power Supplies

1. Run X-ARC90 in voltage mode. **Not done.**
2. Test SWM p.s. setpoint buffer. **Not done.**
3. Tom Nehring may swap circuit breakers 42 and 44, probably won't happen anytime soon. **Not done.**
4. If ground fault comes back on WQ3 p.s. try something else. AFB board was replaced 9:50 Wed 3/5/03. **Problem has not returned as of now.**
5. XARC90 and YARC90 phase sequence relay jumpered out. Decide what to do for fix. YARC90 phase sequence relay probably still good because LED lights. **Not done.**